

Idaho Disease Bulletin

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RADIOACTIVE IODINE 131 EXPOSURES IN IDAHO

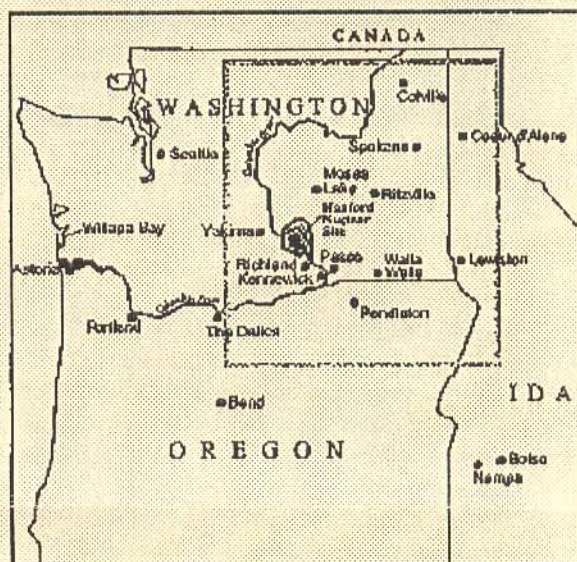
Editor's Note: The Idaho Department of Health and Welfare is participating in a project to help evaluate exposures to radioactive iodine among Idaho residents from the Hanford Nuclear Site in Washington. In addition, recent information about exposures to radioactive iodine among Idaho residents from the Nevada Test Site in the 1950s and 1960s has added to concern about the possible health effects in Idaho.

Between December 1944 and December 1972, the Hanford Nuclear Site released radioactive iodine 131 into the air during their plutonium production processes. Many people are concerned about the impact the releases had on their health and what they can and should do about it. During the next year, intervention programs, study results, and clinical practice guidelines will become available to help citizens and their health care providers to address these issues. This article summarizes upcoming programs, services and studies that will generate interest and concerns about radiation exposure, particularly iodine 131. The result of existing studies may answer some questions about the risk of exposure to iodine 131 and its relationship to thyroid diseases. They may also provide some guidance to practitioners who have patients in this at-risk population.

THE HANFORD INDIVIDUAL DOSE ASSESSMENT (IDA) PROJECT

The Hanford IDA Project is a public service jointly operated by the Idaho Division of Health, the Oregon Health Division, the Washington State Department of Health and the Centers for Disease Control and Prevention. This public service program will provide citizens with thyroid dose estimates from exposure to iodine 131 released into the air from Hanford.

The Hanford IDA Project will use the Hanford Environmental Dose Reconstruction (HEDR) Project's computer model to calculate individual thyroid dose estimates. Citizens who lived or spent time in the HEDR study area (rectangular box on map) between December 26, 1944 and December 31, 1957, are eligible to receive



HEDR Project Study Area

The box (upper center) indicates the boundaries of the study area.

their individual thyroid dose estimates. According to the HEDR Project, iodine 131 was the radionuclide released into the air in the largest amounts. Transmission through contaminated milk, fresh fruit, and vegetables accounted for as much as 99 percent of a person's exposure.

The Hanford IDA Project will use the HEDR computer models and add an individual's residence and diet history to determine a thyroid dose estimate. The computer models take into account the volume and concentration

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of the Hanford releases, the environment, the pathways by which people were exposed, and other variables.

When people receive their thyroid dose estimate, they will also receive a booklet of information about the dose estimates and what they may mean to their health. The booklet will cover topics such as: exposure and risk statements, what is and what is not included in the dose estimate, and resources and referrals. The Hanford IDA Project has contacted many people who are interested in taking this information to their health care providers to seek individual advice and preventive screening. According to a level of interest survey conducted by the Idaho Division of Health's Bureau of Environmental Health & Safety, approximately 6,000 Idahoans are interested in finding out the amount of radiation exposure they received due to Hanford's releases. Washington, Idaho, and Oregon state public health agencies are planning to deliver individual dose estimates starting in late 1998. However, the date is contingent upon completion of computer programming and field testing of the process and materials.

HANFORD THYROID DISEASE STUDY (HTDS)

In addition to the Hanford IDA Project, the HTDS will be able to provide answers about people's exposures from Hanford. The HTDS is performing a cohort study through the Fred Hutchinson Cancer Research Center in Seattle. The study will investigate whether thyroid disease is increased among people exposed to atmospheric releases of radioactive materials from Hanford between 1944 and 1957.

The HTDS research team anticipates an early 1999 publishing date. The Hanford IDA Project and the HTDS researchers will collaborate to determine how the individual thyroid dose estimates and the results from the HTDS study can be used to further determine risk and develop guidelines for preventative monitoring.

HANFORD MEDICAL MONITORING PROGRAM

Another anticipated program is the Hanford Medical Monitoring Program. People receiving an individual thyroid dose estimate calculated by the Hanford IDA Project of 10 rad or higher and who lived in the exposed area as children will be eligible for the Program. The monitoring program will provide free access to medical screening for thyroid diseases to citizens who meet certain criteria. Superfund legislation created and authorized the Agency for Toxic Substances and Disease Registry (ATSDR) to initiate medical monitoring for

people exposed to hazardous substances at designated superfund sites. The program is currently under funding consideration for implementation in the Pacific Northwest region.

NEVADA ATOMIC BOMB TESTS: ANOTHER SOURCE OF EXPOSURE

In June, the National Research Council (NRC) and Institute of Medicine of the National Academy of Sciences will publish a report making recommendations regarding the public health implications of the exposure of the American public to iodine 131 from the Nevada Test Site and describe clinical practice guidelines for evaluating, treating, and counseling exposed persons. This report is being developed in response to the National Cancer Institute's recently released study on fallout from the Nevada Test Site. According to the report, ninety nuclear tests released almost 99 percent of the total iodine 131 entering the atmosphere from the bomb tests conducted at the Nevada Test Site during the 1950s and 1960s. Radioiodine fallout was deposited everywhere in the contiguous United States with the highest average deposits estimated at 17 rads in Idaho and Montana.

ADDITIONAL INFORMATION

If you would like more information about any of the projects, studies, or programs mentioned please contact:

Elke Shaw-Tulloch
Idaho Division of Health
208-334-5950

Hanford Individual Dose Assessment Project
1-800-432-6242
<http://www.doh.wa.gov/ehp/rp/rp-ida2.htm>

Hanford Environmental Dose Reconstruction Project
1-800-545-5581

Hanford Thyroid Disease Study
1-800-638-4837
<http://www/fhcrc.org/science/phs/htds/>

Idaho Hanford Health Information Network
1-800-793-6113 or
208-334-5544 in Boise

STD TREATMENT GUIDELINES

Copies of the Centers for Disease Control and Prevention's **1998 Sexually Transmitted Diseases Treatment Guidelines** and **Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents** (November 5, 1997) are available free from your district health department. To order, please call the district health department in your area:

Panhandle-- Coeur d' Alene	
Jeanne Bock, R.N.	667-3481
North Central-- Lewiston	
Dianne Waldemarson, R.N.	799-3100
Southwest-- Caldwell	
Pat Herbal, R.N.	455-5300
Central-- Boise	
Di Wickliff, R.N.	375-5221
South Central-- Twin Falls	
Mary Decker, R.N.	734-5900
Southeastern-- Pocatello	
Jack Bennett	233-9080
District 7-- Idaho Falls	
Gary Rillema	522-0310

Copies of the guidelines may also be obtained from the Internet:

The 1998 Sexually Transmitted Diseases Treatment Guidelines may be obtained via the CDC website at www.cdc.gov/nchstp/dstd/

Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents (November 5, 1997) may be obtained via the CDC website at www.hivatis.org/

CDC UPDATE

Status of Tuberculosis Epidemic In United States: 1997 Data Point to Number of Warning Signals

There are an estimated 10 to 15 million Americans infected with the TB bacteria, with the potential to develop active TB disease in the future. About 10% of these infected individuals will develop TB disease at some point in their lives.

In 1997, there were 19,855 cases of active TB disease reported in the United States, declining 7% from 21,337 cases in 1996. While the overall decline provides continued evidence that the nation has recovered from the resurgence of TB that occurred in the 1980's, the current data point to a number of areas of continuing concern.

* *The increasing impact of the global TB Epidemic on the U.S. epidemic:*

The proportion of TB cases among people born outside the U.S. (foreign-born), but then immigrating to the U.S., has increased steadily over the past decade. In 1997, 39% of U.S. TB cases were among foreign-born individuals, compared to 27% of cases in 1992. TB case rates among foreign-born individuals remain four to five times higher than those among individuals born in the U.S. Many of these cases are likely the result of infections which were acquired years before.

* *The continued threat of multi drug-resistant TB:*

If individuals with active TB do not complete therapy, they can develop and spread strains of TB that are resistant to available drugs. Multi drug-resistant (MDR.-TB) strains are extremely difficult to treat and can be fatal. Given that MDR.-TB cases have now been reported from 43 states and the District of Columbia, it is clear that every state and community must be prepared to deal with the challenges posed by TB that is resistant to available drug treatment.

TB IN IDAHO

In Idaho, 15 cases of TB were reported in 1997. Although the rate of TB in Idaho is lower than the national rate, some important trends seen nationally are also being seen in Idaho. In 1996 and 1997, 53% of TB cases were foreign-born, compared to 20-40% of cases in the early 1990's. The countries of origin in recent years have included Mexico, Phillippines, Vietnam, Thailand, and Bosnia. The first case of multi drug-resistant TB was reported in Idaho in 1996.

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**Top 5 Reported Diseases in Idaho
Year-To-Date
(April 10)**

Disease	Cases reported 1998 year-to-date	Cases reported 1997 year -to-date
Chlamydia	504	448
Herpes	154	146
Hepatitis C antibody	133	17
Pertussis (Whooping Cough)	116	192
Hepatitis A	62	56

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